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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,862

04/28/2006

Ken Gustaaf Helena Verhaegen

VERH3006/JEK

6760

23364 7590 11/12/2008

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FOURTH FLOOR

ALEXANDRIA, VA 22314-1176

EXAMINER

LAM, THANH

ART UNIT

PAPER NUMBER

2834

MAIL DATE

DELIVERY MODE

11/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/577,862

**Applicant(s)**VERHAEGEN, KEN GUSTAAF  
HELENA**Examiner**

THANH LAM

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 8-11, 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-14, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Species A, figures 1-5, claims 1-7,12-14,17-18 in the reply filed on 9/25/2008 is acknowledged.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6,12-14,17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Le Flem et al. (EP 1251624A2) as submitted by Applicant.

Regarding claim 1, Le Flem et al. disclose cooling arrangement for an electric motor or generator that includes consisting of a housing, a slotless tubular stator lamination (5), a rotor (4) with permanent magnets and electric windings (13) which are provided between the stator lamination and the rotor, a cooler (12) upon which said windings (13) are provided, said cooler comprising a cooling element (12) which is provided between the stator lamination and the rotor, said cooling element being is provided with teeth (20a-b, 24a-b) directed radially towards the rotor and which extend in an axial direction of the stator and in between which axially directed grooves (22) are defined, such that the cooling element has an external form of a conventional stator lamination with teeth for providing said windings.

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Regarding claim 2, Le Flem et al. disclose the teeth and grooves are evenly distributed about an inner perimeter of the cooler .

Regarding claim 3, Le Flem et al. disclose the windings have axial parts which extend in grooves and bent parts (34) which are bundled together into a winding head disposed on both far ends of the stator.

Regarding claim 4, Le Flem et al. disclose the cooler comprises a cooling element having one or several passages for a cooling fluid.

Regarding claim 5, Le Flem et al. disclose the passages are axially directed and are connected to an outlet collector (44) on one far end of the stator and to an inlet collector (42) on the other far end of the stator, respectively.

Regarding claim 6, Le Flem et al. disclose the cooling element comprises a double-walled tube including an outer tube and an inner tube.

Regarding claim 12, Le Flem et al. disclose the outlet and inlet collectors are each formed of a ring-shaped element which confines a ring-shaped chamber, said ring-shaped element being connected to a side wall against a far end of the cooling element and wherein whereby this side wall has been worked open at the said passages of the cooling element .

Regarding claim 13, Le Flem et al. disclose each ring-shaped element is connected to the housing with an outer wall and wherein at least one opening is provided in this outer wall, which opening is situated opposite to an outlet opening and inlet opening, respectively, in the housing.

Regarding claim 14, Le Flem et al. disclose in the ring-shaped element in the wall directed towards the rotor there is provided a recess in which the winding head is cased on the respective far end concerned of the stator.

Regarding claim 17, Le Flem et al. disclose the cooler comprises (6) is made of a thermally conductive and electrically insulating material.

Regarding claim 18, Le Flem et al. disclose the cooler defines a separation between the cooling fluid and the electric windings.

***Allowable Subject Matter***

4. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THANH LAM whose telephone number is (571)272-2026. The examiner can normally be reached on Mo-Fr, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen P. Leung can be reached on (571) 272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thanh Lam/  
Primary Examiner  
Art Unit 2834

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